

AMENDMENTS TO THE CLAIMS

1. **(Currently Amended)** A closed loop continuous emulsion polymerisation apparatus comprising

a circulation pump having an inlet and an outlet,
~~at least one monomer feed and at least one feed for water phase,~~
a reactor tube connecting the outlet of the circulation pump with the inlet of the circulation pump, said reactor tube being capable of receiving a cleaning pig and having at least one ~~and which receives the monomer feed and~~ at least one ~~water phase feed, wherein said monomer and said water phase form a~~ polymer emulsion within the reactor tube and said polymer emulsion is recirculated by the circulation pump and through which the circulation pump recirculates a polymer emulsion along the entire length of the reactor tube, and at least one ~~an outlet for the discharge of overflow of a portion of the polymer emulsion,~~
a by-pass tube which circumvents for by-passing a pig around the circulation pump,
and a pig receiving station which is in parallel connection with the circulation pump or the reactor tube.
2. **(Currently Amended)** The polymerisation apparatus according to claim 1, wherein the pig receiving station is integrated into the by-pass tube ~~for by-passing a pig around the circulation pump.~~
3. **(Currently Amended)** The polymerisation apparatus according to claim 1, wherein the circulation pump has a suction side and a delivery side and the reactor tube has an aperture through which the reactor tube is in fluid communication with the suction inlet side of the circulation pump and continues on to the delivery outlet side of the circulation pump, the part of the reactor tube between the suction inlet and delivery outlet sides of the circulation pump serving as the pig receiving station.
4. **(Currently Amended)** The polymerisation apparatus according to claim 3, wherein the aperture is a slot extending substantially in the longitudinal direction of the reactor tube.

5. **(Original)** The polymerisation apparatus according to claim 4, wherein the width of the slot is smaller than the width of the pig.
6. **(Original)** The polymerisation apparatus according to claim 5, wherein the width of the slot increases downstream.
7. **(Previously Presented)** The polymerisation apparatus according to claim 1, wherein the reactor tube comprises a means for directing the pig into the pig receiving station.
8. **(Original)** The polymerisation apparatus according to claim 1, wherein at least a substantial part of the reactor tube forms at least one helical coil.
9. **(Previously Presented)** The polymerization apparatus according to claim 1, further comprising a pig detector for checking whether the pig is present in the pig receiving station.
10. **(Withdrawn)** A process for preparing emulsion polymer by means of the polymerisation apparatus according to claim 1.
11. **(Withdrawn)** The process according to claim 9, wherein a pig is launched at intervals ranging from 1 to 60 minutes.
12. **(Withdrawn)** The process according to claim 9, wherein a pig is launched at intervals ranging from 10 to 20 minutes.
13. **(Currently Amended)** A closed loop continuous emulsion polymerisation apparatus comprising
 - a circulation pump having an inlet a suction side and an outlet a delivery side;
 - a reactor tube which connects the outlet delivery side of the circulation pump to the inlet suction side of the circulation pump; wherein the reactor tube has at least one inlet for monomer feed; at least one feed inlet for water phase

feed; and an outlet for the discharge of a polymer emulsion formed within the reactor tube from the monomer feed and water phase feed;

a pig for cleaning the apparatus wherein the pig is capable of circulating through the reactor tube;

a by-pass tube for by-passing a pig around that circumvents the circulation pump; and

a pig receiving station which is in parallel connection with the circulation pump or the reactor tube and which is releasably engaged to the by-pass tube or the reactor tube such that the pig receiving station may be separated is capable of being disengaged from the apparatus.

14. (Currently Amended) A closed loop continuous emulsion polymerisation apparatus capable of receiving a cleaning pig, said apparatus comprising

a circulation pump having an inlet a suction side and an outlet a delivery side;

a reactor tube which connects the outlet delivery side of the circulation pump to the inlet suction side of the circulation pump; wherein the reactor tube has at least one inlet for monomer feed; at least one feed inlet for water phase feed; and an outlet for the discharge of a polymer emulsion formed within the reactor tube from the monomer feed and water phase feed;

a by-pass tube for by-passing a pig around that circumvents the circulation pump;

a pig receiving station which is in parallel connection with the circulation pump or the reactor tube and which comprises a means for removing the pig from or inserting the pig into the pig receiving station without disruption to the flow of the polymer emulsion.